CITY OF DULUTH

REQUEST FOR PROPOSALS FOR

Development and Implementation of an Energy Service Micro-Grid System

RFP NUMBER 19-05AA

ISSUED February 14, 2019

PROPOSALS DUE Thursday, March 14, 2019

SUBMIT TO

CITY OF DULUTH
ATTN: PURCHASING DIVISION
CITY HALL, ROOM 120
411 WEST 1ST STREET
DULUTH, MN 55802
PART I - GENERAL INFORMATION

I-1. **Project Overview.** The City of Duluth is soliciting proposals for the development and implementation of a privately owned and operated micro-grid to be located and operated in conjunction with the operations of the City of Duluth Lakewood Water Treatment Plant. Additional detail provided in **Part IV** of this RFP.

I-2. **Calendar of Events.** The City will make every effort to adhere to the following schedule:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deadline to submit Questions via email to <a href="mailto:purchasing@duluthmn.gov">purchasing@duluthmn.gov</a></td>
<td>2:00 PM</td>
<td>March 5, 2019</td>
</tr>
<tr>
<td>Answers to questions will be posted to the City website no later than:</td>
<td>4:30 PM</td>
<td>March 7, 2019</td>
</tr>
<tr>
<td>Proposals must be received in the Purchasing Office by:</td>
<td>4:30 PM</td>
<td>March 14, 2019</td>
</tr>
</tbody>
</table>

I-3. **Rejection of Proposals.** The City reserves the right, in its sole and complete discretion, to reject any and all proposals or cancel the request for proposals, at any time prior to the time a contract is fully executed, when it is in its best interest. The City is not liable for any costs the Bidder incurs in preparation and submission of its proposal, in participating in the RFP process or in anticipation of award of the contract.

I-4. **Pre-proposal Conference.** A pre-proposal conference is not planned for this project.

I-5. **Questions & Answers.** Any questions regarding this RFP must be submitted by e-mail to the Purchasing Office at purchasing@duluthmn.gov no later than the date indicated on the Calendar of Events. Answers to the questions will be posted as an Addendum to the RFP.

I-6. **Addenda to the RFP.** If the City deems it necessary to revise any part of this RFP before the proposal response date, the City will post an addendum to its website http://www.duluthmn.gov/purchasing/bids-request-for-proposals/. Although an e-mail notification will be sent, it is the Bidder’s responsibility to periodically check the website for any new information.

I-7. **Proposals.** To be considered, hard copies of proposals must arrive at the City on or before the time and date specified in the RFP Calendar of Events. The City will not accept proposals via email or facsimile transmission. The City reserves the right to reject or to deduct evaluation points for late proposals.
Proposals must be signed by an authorized official. If the official signs the Proposal Cover Sheet attached as Appendix B, this requirement will be met. Proposals must remain valid for 60 days or until a contract is fully executed, whichever is later.

Please submit one (1) paper copy of the Technical Submittal and one (1) paper copy of the Cost Submittal. The Cost Submittal should be in a separate sealed envelope. In addition, bidders shall submit one copy of the entire proposal (Technical and Cost submittals, along with all requested documents) on flash drive in Microsoft Office-compatible or pdf format.

All materials submitted in response to this RFP will become property of the City and will become public record after the evaluation process is completed and an award decision made.

I-8. Small Diverse Business Information. The City encourages participation by minority, women, and veteran-owned businesses as prime contractors, and encourages all prime contractors to make a significant commitment to use minority, women, veteran-owned and other disadvantaged business entities as subcontractors and suppliers. A list of certified Disadvantaged Business Enterprises is maintained by the Minnesota Unified Certification Program at http://mnucp.metc.state.mn.us/.

I-9. Term of Contract. The term of the contract will begin once the contract is fully executed. The selected Bidder shall not start the performance of any work nor shall the City be liable to pay the selected Bidder for any service or work performed or expenses incurred before the contract is executed.

I-10. Mandatory Disclosures. By submitting a proposal, each Bidder understands, represents, and acknowledges that:

A. Their proposal has been developed by the Bidder independently and has been submitted without collusion with and without agreement, understanding, or planned common course of action with any other vendor or suppliers of materials, supplies, equipment, or services described in the Request for Proposals, designed to limit independent bidding or competition, and that the contents of the proposal have not been communicated by the Bidder or its employees or agents to any person not an employee or agent of the Bidder.

B. There is no conflict of interest. A conflict of interest exists if a Bidder has any interest that would actually conflict, or has the appearance of conflicting, in any manner or degree with the performance of work on the project. If there are potential conflicts, identify the municipalities, developers, and other public or private entities with whom your company is currently, or have been, employed and which may be affected.
C. It is not currently under suspension or debarment by the State of Minnesota, any other state or the federal government.
D. The company is either organized under Minnesota law or has a Certificate of Authority from the Minnesota Secretary of State to do business in Minnesota, in accordance with the requirements in M.S. 303.03.

I-11. Notification of Selection. Bidders whose proposals are not selected will be notified in writing.

PART II - PROPOSAL REQUIREMENTS

1) Cover letter
2) Background and experience of the Company in this application
   a) Highlight five similar projects
   b) Provide five references
3) Identify project lead; provide resume for lead and all key project staff
   a) Identify names of potential subcontractors or consultants
4) Provide detailed strategy for determining project economics
   a) Provide examples of how energy services may be purchased by the City of Duluth. This should include, but not be limited to:
      i) Design, Build, Own, Operate and Maintain
      ii) Design, Build, Sell to City of Duluth after tax benefits and depreciation
      iii) Design, Build and Sell to a mutually agreed upon third party
   b) One of the key goals for this project is to be cost neutral, or as close as possible, for the City of Duluth water department. Detail how this will be determined.
5) Provide a detailed project timeline that identifies key project milestones.

PART III - CRITERIA FOR SELECTION

The proposals will be reviewed by City Staff. The intent of the selection process is to review proposals and make an award based upon qualifications as described therein. The City reserves the right to schedule interviews after initial review of proposals. A 100-point scale will be used to create the final evaluation recommendations. The factors and weighting on which proposals will be judged are:

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualifications of the Bidder and Personnel</td>
<td>10%</td>
</tr>
<tr>
<td>Prior experience with similar work/outcomes</td>
<td>30%</td>
</tr>
<tr>
<td>Technical Approach/Work Plan</td>
<td>40%</td>
</tr>
<tr>
<td>Cost to City</td>
<td>20%</td>
</tr>
</tbody>
</table>

PART IV – PROJECT DETAIL

The City of Duluth’s position is that it is indisputable that our climate is changing, and with these changes comes challenges that are greater than have been common in the
past. The increased intensity and frequency of storm activity in and around the City since 2012, has required the organization to rebuild millions of dollars of critical City infrastructure. During the summer of 2016, a windstorm knocked out power to over a quarter of Duluth’s residents for more than 4 days, and both power supplies to the Lakewood Water Treatment Facility failed. This facility pumps all of the fresh water supply for over 120,000 customers across the City and region. Fortunately, the local utility and City Public Works were able to re-establish the power supply to the facility before the entire Duluth water system ran dry. This incident led the City to begin exploring climate-resilient strategies that would ensure that critical infrastructure remains viable.

To that end, the City of Duluth is requesting proposals for the design and implementation of a micro-grid at its Lakewood Water Treatment Plant, located at 8130 Congdon Park Blvd., Duluth, MN 55804. The micro-grid should include the following elements: renewable energy, energy storage, and a mechanical energy and control platform that will not only monitor and operate the micro-grid, but will also monitor and react to changes in the City’s water purifying and distribution systems. The system should also provide for the direct reduction of greenhouse gas emissions from the plant, while at the same time ensuring that water delivery remains viable for City of Duluth customers. Further, the City desires to provide demand response ability to our local electric utility during times of high electrical demand.

Additional information about the site, electrical data, and pumping data is available in Appendix B (attached) and Appendix C (separate Excel document).

**IV-1.** The key elements of this system should include the following:

i. Reduce purchased energy by using renewables to offset the number of kilowatt-hours purchased from the local utility;

ii. Provide demand response services to reduce related charges incurred from our local utility;

iii. Remediate motor power factor issues, which currently incur financial penalties on the monthly bill;

iv. Reduce Greenhouse Gas emissions from the production and distribution of potable water to City water customers;

v. Under necessary or favorable circumstances, the micro-grid shall be able to operate the plant and distribute water without energy from the local electrical utility grid indefinitely and in a timely manner;

vi. There should be no initial out of pocket capital expenses incurred by the City of Duluth;

vii. The selected company shall make appropriate purchases to capture federal tax incentives prior to anticipated changes as of December 31, 2019; and

viii. The selected company shall provide these services at an agreed upon cost for a term between 15 and 25 years.
IV-2 The proposal should detail how to meet the following goals:

i. The cost of these energy services will not significantly increase the operating costs associated with the production and distribution of potable water;

ii. Because of this project, the current transformer at the Lakewood Plant will no longer be the weakest link in that system.

iii. The current overhead power lines that are owned by our public utility will be buried; and

iv. The micro-grid will be able to provide demand response services to the local electrical utility at times of high demand.

IV-3. Anticipated timeline for the RFP process:

i. RFP closes -- March 14, 2019

ii. Interviews, if required, may be scheduled within approximately 30 days after RFP close

iii. Contracting completed by mid-May 2019

iv. Engineering design, proof cost and long term service contracting

v. City Council approval August 21, 2019

vi. Substantial investment by end of 2019 to capture federal tax credit
# Bidder Information:

<table>
<thead>
<tr>
<th>Bidder Name</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Mailing Address</td>
<td></td>
</tr>
<tr>
<td>Contact Person</td>
<td></td>
</tr>
<tr>
<td>Contact Person’s Phone Number</td>
<td></td>
</tr>
<tr>
<td>Contact Person’s E-Mail Address</td>
<td></td>
</tr>
<tr>
<td>Federal ID Number</td>
<td></td>
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<tr>
<td>Authorized Signature</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td></td>
</tr>
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</table>
### APPENDIX B

**Name:** City Of Duluth  
**Account:** 9651300000

**Bill Number:** 965604586486  
**Bill Date:** February 02, 2018

#### LAKWOOD PUMP  
**DULUTH MN**

**Large Light & Power:** 75  
**31 Days**

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
<th>Read Code</th>
<th>End Date</th>
<th>End Read</th>
<th>Read Code</th>
<th>Measured</th>
<th>Reg Const</th>
<th>Usage</th>
<th>Total Usage</th>
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<td>EMP3155331</td>
<td>12/31/2017</td>
<td>65203</td>
<td>Regular</td>
<td>01/31/2018</td>
<td>65816</td>
<td>Regular</td>
<td>613</td>
<td>1050</td>
<td>643650</td>
<td>643,650 Kilowatt Hours (kWh) used</td>
</tr>
<tr>
<td>EMP3155391</td>
<td>12/31/2017</td>
<td>44318</td>
<td>Regular</td>
<td>01/31/2018</td>
<td>44850</td>
<td>Regular</td>
<td>532</td>
<td>1050</td>
<td>558800</td>
<td>558,800 Kilovar Hours (kVArH) used</td>
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</table>

** Illustrated Data:**

- **Billed for the Last 24 Months:**
  - Measured Demand: 924
  - Adjusted Demand: 1,039
  - Billed Demand: 1,326
  - Power Factor: 75.524

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#### SKYLINE PKWY & 49TH AVE  
**DULUTH MN**

**General Service:** 25  
**31 Days**

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
<th>Read Code</th>
<th>End Date</th>
<th>End Read</th>
<th>Read Code</th>
<th>Total Usage</th>
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<tr>
<td>EMP136037</td>
<td>12/11/2017</td>
<td>34336</td>
<td>Regular</td>
<td>01/11/2018</td>
<td>34755</td>
<td>Regular</td>
<td>429 Kilowatt Hours (kWh) used</td>
</tr>
</tbody>
</table>

**Illustrated Data:**

- **Billed for the Last 24 Months:**
  - The average KWH per day for this service is 14
  - For the same period last year, it was 14
  - The average daily cost for this service is $1.93

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**Next Scheduled Meter Read:** 02/28/2018

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**Next Scheduled Meter Read:** 02/10/2018

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The average KWH per day for this service is 14
For the same period last year, it was 14
The average daily cost for this service is $1.93
Large Light & Power: 75

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
<th>Read Code</th>
<th>End Date</th>
<th>End Read</th>
<th>Read Code</th>
<th>Measured</th>
<th>Reg Const</th>
<th>Usage</th>
<th>Total Usage</th>
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</thead>
<tbody>
<tr>
<td>EMP933501</td>
<td>01/31/2018</td>
<td>66816</td>
<td>Regular</td>
<td>02/28/2018</td>
<td>66389</td>
<td>Regular</td>
<td>573</td>
<td>1050</td>
<td>601650</td>
<td>601,650 Kwh (Kwh) used</td>
</tr>
<tr>
<td>EMP933501</td>
<td>01/31/2018</td>
<td>44890</td>
<td>Regular</td>
<td>02/28/2018</td>
<td>45335</td>
<td>Regular</td>
<td>485</td>
<td>1050</td>
<td>509250</td>
<td>599,250 Kwh (Kwh) used</td>
</tr>
</tbody>
</table>

100 Kwh or less (Monthly Minimum) 1,100.00
1,064 Kwh @ $9.30 15,475.20
Primary Voltage Discount 1,764 Kwh @ -$1.75 -3,087.00
Energy Charge 601,650 Kwh @ $0.03722 22,393.41
Base/Revenues Per Kwh @ $0.0106600 6,413.59
Fuel/Purchased Energy 601,650 Kwh @ $0.01108 6,666.28
Interim Rate Adjustment 5.07% 2,482.35
Affordability Surcharge 10.81
Renewable Adjustment 601,650 Kwh @ -$0.0009 5,641.49
Transmission Adjustment 601,650 Kwh @ $0.00193 1,161.18
Residual 4 Plan Adjustment 601,650 Kwh @ $0.00035 210.58
Solar Energy Adjustment 601,650 Kwh @ -$0.00005 317.19
Resource Adjustment 55,420.71

Billed Demand 1,764

Power Factor 76.3285

SKYLINE PKWY & 49TH AVE E
DULUTH MN

General Service: 25

Service Charge 421 Kwh @ $0.07836 10.50
Energy Charge 421 Kwh @ $0.0730 32.99
Base/Revenues Per Kwh @ $0.0106600 4.49
Fuel/Purchased Energy 421 Kwh @ $0.011181 4.97
Interim Rate Adjustment 5.07% 2.68
Affordability Surcharge 0.67
Renewable Adjustment 421 Kwh @ -$0.0009 0.30
Transmission Adjustment 421 Kwh @ $0.00193 0.81
Residual 4 Plan Adjustment 421 Kwh @ $0.00035 0.15
Solar Energy Adjustment 421 Kwh @ -$0.00006 0.03
Resource Adjustment 59.08

The average kwh per day for this service is 14
For the same period last year, it was 14
The average daily cost for this service is $1.91
LAKESIDE PUMP DULUTH MN

<table>
<thead>
<tr>
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<th>Start Date</th>
<th>Start Read</th>
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<th>End Read</th>
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<th>Reg Const</th>
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<tbody>
<tr>
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<td>66389</td>
<td>Regular</td>
<td>03/31/2018</td>
<td>67031</td>
<td>Regular</td>
<td>642</td>
<td>1050</td>
<td>674100</td>
<td>674,100 Kilowatt Hours (kWh) used</td>
</tr>
<tr>
<td>EMP335391</td>
<td>02/28/2018</td>
<td>45335</td>
<td>Regular</td>
<td>03/31/2018</td>
<td>45887</td>
<td>Regular</td>
<td>552</td>
<td>1050</td>
<td>579600</td>
<td>579,600 Kilovar Hours (KVARH) used</td>
</tr>
</tbody>
</table>

100 kW or Less (Monthly Minimum) 1,100.00
1,666 kW @ $9.30 15,493.80
Primary Voltage Discount 1,766 kW @ $1.75 -3,090.50
Energy Charge 674,100 kWh @ $0.03722 25,090.00
Bos4/Renew/Trans Base Per kWh @ $0.0106600 7,185.91
Fuel/Purchased Energy 674,100 kWh @ $0.01181 7,469.03
Interim Rate Adjustment 5.07% 2,699.69
Affordability Surcharge 10.81
Renewable Adjustment 674,100 kWh @ $0.00009 -606.69
Transmission Adjustment 674,100 kWh @ $0.00193 1,301.04
Boswell 4 Plan Adjustment 674,100 kWh @ $0.00035 235.94
Solar Energy Adjustment 674,100 kWh @ $-0.0001 -67.41
Resource Adjustment 3,495.55
Total charge this period 60,227.14

SKYLINE PKWY & 49TH AVE E DULUTH MN

<table>
<thead>
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<th>Meter #</th>
<th>Start Date</th>
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<th>End Read</th>
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<tbody>
<tr>
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<td>02/11/2018</td>
<td>35186</td>
<td>Regular</td>
<td>03/11/2018</td>
<td>35553</td>
<td>Regular</td>
<td>377 Kilowatt Hours (kWh) used</td>
</tr>
</tbody>
</table>

Service Charge 10.50
Energy Charge 377 kWh @ $0.07836 29.54
Bos4/Renew/Trans Base Per kWh @ $0.0106600 4.02
Fuel/Purchased Energy 377 kWh @ $0.01181 4.45
Interim Rate Adjustment 5.07% 2.46
Affordability Surcharge 0.67
Renewable Adjustment 377 kWh @ $-0.0009 -0.34
Transmission Adjustment 377 kWh @ $0.00193 0.73
Boswell 4 Plan Adjustment 377 kWh @ $0.00035 0.13
Solar Energy Adjustment 377 kWh @ $-0.0001 -0.04
Resource Adjustment 1.90
Total charge this period 54.02

The average KWH per day for this service is 13
For the same period last year, it was 13
The average daily cost for this service is $1.93
### LAKEWOOD PUMP DULUTH MN

#### Large Light & Power: 75
30 Days

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
<th>Read Code</th>
<th>End Date</th>
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<th>Usage</th>
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<tbody>
<tr>
<td>EMP335391</td>
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<td>67031</td>
<td>Regular</td>
<td>04/30/2018</td>
<td>67634</td>
<td>Regular</td>
<td>603</td>
<td>1050</td>
<td>633150</td>
<td>633,150 Kilowatt Hours (kWh) used</td>
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<tr>
<td>EMP335391</td>
<td>03/31/2018</td>
<td>45887</td>
<td>Regular</td>
<td>04/30/2018</td>
<td>46436</td>
<td>Regular</td>
<td>519</td>
<td>1050</td>
<td>544950</td>
<td>544,950 Kilowatt Hours (kWh) used</td>
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</table>

100 kW or Less (Monthly Minimum) 1,100.00
1,671 kW @ $9.30 15,540.30
Primary Voltage Discount 1,771 kW @ $1.75 -3,099.25
Energy Charge 633,150 kWh @ $0.037722 23,565.84
Bos4/Renew/Trans Base Per kWh @ $0.0106600 6,740.38
Fuel/Purchased Energy 633,150 kWh @ $0.01108 7,015.30
Interim Rate Adjustment 5.07% 2,579.19
Affordability Surcharge 10.81
Renewable Adjustment 633,150 kWh @ $-0.0009 -569.84
Transmission Adjustment 633,150 kWh @ $0.00132 1,221.98
Boswell 4 Plan Adjustment 633,150 kWh @ $0.00035 221.60
Solar Energy Adjustment 633,150 kWh @ $-0.00013 -82.31
Resource Adjustment 3,521.58
Total charge this period 57,774.58

Measured Demand 1,579
Adjusted Demand 1,771
Billed Demand 1,771
Power Factor 75.7924

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### SKYLINE PKWY & 49TH AVE E

#### General Service: 25
31 Days

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
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<th>End Read</th>
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<tr>
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<td>03/11/2018</td>
<td>35563</td>
<td>Regular</td>
<td>04/12/2018</td>
<td>35951</td>
<td>Regular</td>
<td>398 Kilowatt Hours (kWh) used</td>
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</tbody>
</table>

Service Charge 10.50
Energy Charge 398 kWh @ $0.07836 31.19
Bos4/Renew/Trans Base Per kWh @ $0.0106600 4.25
Fuel/Purchased Energy 398 kWh @ $0.01181 4.70
Interim Rate Adjustment 5.07% 2.57
Affordability Surcharge 0.67
Renewable Adjustment 398 kWh @ $-0.0009 -0.36
Transmission Adjustment 398 kWh @ $0.00103 0.77
Boswell 4 Plan Adjustment 398 kWh @ $0.00035 0.14
Solar Energy Adjustment 398 kWh @ $-0.00013 -0.05
Resource Adjustment 2.23
Total charge this period 55.61

The average KWH per day for this service is 13
For the same period last year, it was 13
The average daily cost for this service is $1.83
### Lakewood Pump

**Duluth MN**

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
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<th>Usage</th>
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<tbody>
<tr>
<td>EMP335591</td>
<td>04/30/2018</td>
<td>67634</td>
<td>Regular</td>
<td>05/31/2018</td>
<td>68255</td>
<td>Regular</td>
<td>621</td>
<td>1050</td>
<td>552050</td>
<td>652,050 Kilowatt Hours (KWh) used</td>
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<tr>
<td>EMP335591</td>
<td>04/30/2018</td>
<td>46406</td>
<td>Regular</td>
<td>05/31/2018</td>
<td>46941</td>
<td>Regular</td>
<td>535</td>
<td>1050</td>
<td>561750</td>
<td>561,750 Kilovar Hours (KWH) used</td>
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100 kW or Less (Monthly Minimum) 1,100.00
1,992 kW @ $9.30          18,525.60
Primary Voltage Discount 2,092 kW @ -$1.75 -3,661.00
Energy Charge 652.050 kWh @ $0.03722 24,269.30
Bas4/Renew/Trans Base kWh @ $0.0105 6,950.85
Fuel/Purchased Energy 652.050 kWh @ $0.01108 7,224.71
Interim Rate Adjustment 6.07% 2,758.56
Affordability Surcharge 10.81
Renewable Adjustment 652.050 kWh @ -$0.0009 -586.85
Transmission Adjustment 652.050 kWh @ $0.0013 1,250.46
Boswell 4 Plan Adjustment 652.050 kWh @ $0.00035 228.22
Solar Energy Adjustment 652.050 kWh @ -$0.00015 -97.81
Resource Adjustment 3,926.65
Total charge this period 61,907.50

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**Skyline Pkwy & 49th Ave E**

**Duluth MN**

**General Service: 25**

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
<th>Read Code</th>
<th>End Date</th>
<th>End Read</th>
<th>Read Code</th>
<th>Total Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMP136037</td>
<td>04/11/2018</td>
<td>35961</td>
<td>Regular</td>
<td>05/11/2018</td>
<td>36355</td>
<td>Regular</td>
<td>394 Kilowatt Hours (KWh) used</td>
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</tbody>
</table>

Service Charge 10.50
Energy Charge 394 kWh @ $0.07896 30.87
Bas4/Renew/Trans Base Per kWh @ $0.0106600 4.20
Fuel/Purchased Energy 394 kWh @ $0.01181 4.65
Interim Rate Adjustment 5.07% 2.55
Affordability Surcharge 0.67
Renewable Adjustment 394 kWh @ -$0.0009 -0.35
Transmission Adjustment 394 kWh @ $0.00193 0.76
Boswell 4 Plan Adjustment 394 kWh @ $0.00035 0.14
Solar Energy Adjustment 394 kWh @ -$0.00015 -0.06
Resource Adjustment 2.40
Total charge this period 56.33

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The average KWH per day for this service is 13
For the same period last year, it was 13
The average daily cost for this service is $1.88
Large Light & Power: 75
30 Days

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
<th>Read Code</th>
<th>End Date</th>
<th>End Read</th>
<th>Read Code</th>
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<th>Reg Contd</th>
<th>Usage</th>
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<tbody>
<tr>
<td>EMP335391</td>
<td>05/31/2018</td>
<td>68255</td>
<td>Regular</td>
<td>06/30/2018</td>
<td>66887</td>
<td>Regular</td>
<td>652</td>
<td>1050</td>
<td>663600</td>
<td>663,600 Kilowatt Hours (KWh) used</td>
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<tr>
<td>EMP335391</td>
<td>05/31/2018</td>
<td>46841</td>
<td>Regular</td>
<td>06/30/2018</td>
<td>47473</td>
<td>Regular</td>
<td>532</td>
<td>1050</td>
<td>556600</td>
<td>558,600 Kilovar Hours (KVarH) used</td>
</tr>
</tbody>
</table>

100 kW or Less (Monthly Minimum) 1,100.00
Primary Voltage Discount 1,743 kW @ -1.75 15,279.20
Energy Charge 663,600 kWh @ $0.03722 24,699.19
Bos4/Renew/Trans Base Per kWh @ $0.0106600 7,073.98
Fuel/Purchased Energy 663,600 kWh @ $0.01108 7,352.69
Interim Rate Adjustment 5.07% 2,615.99
Affordability Surcharge 10.81
Renewable Adjustment 663,600 kWh @ $-0.0009 -597.24
Transmission Adjustment 663,600 kWh @ $0.00193 1,280.75
Boswell 4 Plan Adjustment 663,600 kWh @ $0.00035 232.26
Solar Energy Adjustment 663,600 kWh @ $-0.00017 -112.81
Resource Adjustment 3,916.67
Total charge this period 59,845.34

SKYLINPKW & 49TH AVE E
DULUTH MN
General Service: 25
31 Days

<table>
<thead>
<tr>
<th>Meter #</th>
<th>Start Date</th>
<th>Start Read</th>
<th>Read Code</th>
<th>End Date</th>
<th>End Read</th>
<th>Read Code</th>
<th>Total Usage</th>
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</thead>
<tbody>
<tr>
<td>EMP136037</td>
<td>05/11/2018</td>
<td>38355</td>
<td>Regular</td>
<td>06/11/2018</td>
<td>386741</td>
<td>Regular</td>
<td>386 Kilowatt Hours (KWh) used</td>
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</tbody>
</table>

Service Charge 10.50
Energy Charge 386 kWh @ $0.0736 30.25
Bos4/Renew/Trans Base Per kWh @ $0.0106600 4.12
Fuel/Purchased Energy 386 kWh @ $0.01181 4.56
Interim Rate Adjustment 5.07% 2.51
Affordability Surcharge 0.67
Renewable Adjustment 386 kWh @ $-0.0009 -0.35
Transmission Adjustment 386 kWh @ $0.00193 0.74
Boswell 4 Plan Adjustment 386 kWh @ $0.00035 0.14
Solar Energy Adjustment 386 kWh @ $-0.00017 -0.07
Resource Adjustment 2.30
Total charge this period 55.37

The average KWH per day for this service is 12
For the same period last year, it was 13
The average daily cost for this service is $1.79